CHAPTER 5

ALLIED FLAGHOIST PROCEDURES

A large percentage of all tactical messages received by a ship are signaled by flaghoist. Therefore, a broad knowledge of flaghoist communication procedures on the part of every Signalman is essential. As you will learn in chapter 6, flaghoist is also used for international signaling. It comes into play, for example, when your ship exchanges messages with a merchant ship under U.S. flag or otherwise; then somewhat different procedures apply than those governing exchanges of messages between Allied naval units.

Flaghoist signaling provides a rapid and accurate system of passing tactical and administrative information during daylight. Flaghoist is rapid because, by hoisting one or more flags that have a predetermined meaning, you can communicate simultaneously with all ships in company. It is accurate because addressees are required to repeat the signal, flag for flag, allowing the originator to see if addressees have read the hoist correctly. Flaghoist signaling aptly meets the provisions of security, another prime requirement of naval communications. Not only is the range limited, but the meanings of many signals are contained in a classified signal publication.

Flaghoist signaling is especially well suited to tactical signals. All vessels can read the signal at the same time, and all can take action in unison with a minimum chance of error.

To perform effectively as a Signalman, for both military and international situations, you must acquire a solid background in procedures, methods, and rules pertaining to flaghoist communications. The main purposes of this chapter are to illustrate the flags and pennants used; explain how to construct, read, raise, and lower hoists; and discuss partial contents of the *Allied Maritime Tactical Signal and Maneuvering Book*, ATP 1, volume II, from which most tactical signals are derived.

SIGNAL FLAGS AND PENNANTS

LEARNING OBJECTIVES: List the flags and pennants in a standard naval flag bag. List the phonetic name for each letter of the alphabet. Define *tackline* and state its purpose.

The standard Navy flag bag consists of 68 flags: the 26 letters of the alphabet, 10 numeral flags, 10 numeral pennants, 18 special flags and pennants, and 4 substitutes.

Each alphabet flag has the phonetic name of the letter it represents. A numeral flag takes the name of the numeral it represents; numeral pennants are used only in calls. Special flags and pennants are used in tactical maneuvers to direct changes in speed, position, formation, and course; to indicate and identify units; and for specialized purposes. Flags and pennants are spoken and written as shown in figures 5-1 and 5-2.

One good way to learn flags and pennants is to practice sketching each of them, labeling each according to its proper color or colors. When you feel you know every flag and pennant, ask someone to test you. Ask the person testing you to call at random the various letters of the alphabet, and you name and describe the corresponding flags. When you are topside, pay particular attention to flaghoists flying from other ships. Test your ability to recognize and name those flaghoists. Many flags and pennants may be learned as opposites. Number flags can be learned by color and design sequence.

In addition to the 68 flags in the bag, you have a tackline. A tackline is a length of halyard approximately 6 feet long; the exact length depends upon the size of flags in use. The tackline is transmitted and spoken as tack and is written as a dash (hyphen) "-". It is used to avoid ambiguity. It separates signals or groups of numerals that, if not separated, could convey a different meaning from that intended.

Example:

If the signal SL2 means "Prepare to receive personnel casualties," TACK would be inserted between the digit 2 and the given number of casualties: SL2 TACK 27.

TACK also is used to separate range and bearing figures. If C3 means "Investigate possible sighting," the signal might be C3 TACK 345 TACK 20, indicating the sighting at a bearing of 345 and a distance of 20 miles.

FLAG and NAME	Spoken	Written	FLAG and NAME	Spoken	Written	FLAG and NAME	Spoken	Written
A	ALFA	A	M	MIKE	M	Y	YANKEE	γ
B	BRAVO	В	N	NOVEMBER	N	2	ZULU	Z
C	CHARLIE	C	0	OSCAR	0	1	ONE	1
D	DELTA	D	P	PAPA	Р	2	TWO	2
E	ECHO	E	q	OVEBEC	q	3	THREE	3
F .	FOXTROT	F	R	ROMEO	R	4	FOUR	4
G	GOLF	G	S	SIERRA	S	5	FIVE	5
Н	HOTEL	H	T	TANGO	T	6	SIX	6
	INDIA	1	U	UNIFORM	U	7	SEVEN	7
	JULIETT	J	V	VICTOR	٧	8	EIGHT	8
K	KILO	K	W	WHISKEY	w	9	NINE	9
L	LIMA	L	X	XRAY	х	+ + + +	ZERO	В

Figure 5-1.—Alphabet and numeral flags.

PENNANT and NAME	Spoken	Written	PENNANT Or FLAG	Spoken	Written	PENNANT Or Flag	Spoken	Written
	PENNANT ONE	p1	CODE or ANSWER	CODE or Answer	CODE or	NEGATIVE	NEGAT	NEGAT
2	PENNANT TWO	p 2	SCREEN	SCREEN	SCREEN	PREPARATIVE	PREP	PREP
3 .	PENNANT THREE	р3	CORPEN	CORPEN	CORPEN	PORT	PORT	PORT
4	PENNANT Four	p 4	DESIG- NATION	DESIG	DESIG	SPEED	SPEED	SPEED
5	PENNANT FIVE	p5	DIVISION	DIV	DIV	SQUADRON	SQUAD	SQUAD
6	PENNANT SIX	p6	EMERGENCY	EMERGENCY	EMERG	STARBOARD	STARBOARD	STBD
7	PENNANT SEVEN	р7	GROUP/ FLOTILLA	GROUP/ FLOTILLA	GROUP/ FLOTILLA	STATION	NOITATZ	STATION
8	PENNANT Eight	р8	FORMATION	FORMATION	FORM	SUBDIVISION	SUBDIV	SUBDIA
9	PENNANT NINE	p9	INTER- ROGATIVE	INTER- ROGATIVE	INT	TURN	TURN	TURN
	PENNANT	pØ			SUBST	ITUTES		
B	ZERO		1st. SUBSTITUTE	FIRST Sub	1st.	3rd. SUBSTITUTE	THIRD Sub	3rd.
LINE	; AUR		2nd. SUBSTITUTE	SECOND SUB	2nd.	4th. SUBSTITUTE	FOURTH SUB	4th.

Figure 5-2.—Numeral pennants; special flags and pennants.

FLAGHOIST TERMINOLOGY

LEARNING OBJECTIVES: Explain flaghoist terminology and the use of it when communicating with flaghoist.

Every rating has its own vocabulary; the Signalman rating is no exception. You may already be familiar with some of the terms discussed in this section.

Signal flags are stowed in the flag bag. It is not actually a bag, but derives its name from the metal frame covered with canvas, in which flags formerly were stowed. Most ships today are equipped with all-metal bags, which are fireproof and afford more protection for the flags.

Halyards are numbered from outboard to inboard (1, 2, and so on). Hence, No. 1 starboard would be the outboard halyard on the starboard yardarm.

When the end of a hoist gets away from you and flies out of your reach, you can recover it by using a retriever. A retriever is a separate line attached by a metal ring to each halyard. The retriever may be moved up and down by separate lines attached as part of such rigging.

The Signalman who keeps a lookout for signals and calls them out to personnel handling the flags at the flag bag is called the spotter. The spotter will call out, "Stand by your bags," when a signal is being made on another ship. That warning tells those personnel on the bags that a signal is being made and they should be ready to repeat it. The spotter calls out the complete hoist twice, then calls out, "Going up."

An example of an incoming signal is as follows: The spotter calls out, "Stand by your port/starboard bag. Signal in the air from the OTC. First hoist, BT—FORM 3, I say again BT—FORM 3, going up to the dip; second hoist, CORPEN STBD 275, I say again CORPEN STBD 275, going up to the dip; third hoist, SPEED 15—T13, I say again SPEED 15—T13, going up to the dip. End of hoist, end of signal."

Signal flags are bent onto the uphaul part of the halyard. The piece of halyard that is made fast to the last flag in a hoist (so the flags can be hauled down) is called the downhaul. When personnel on the bags have the downhaul secured to the last flag and are ready for the signal to be hoisted, they tell the person on the uphaul to "Take it up."

HOISTING SIGNALS

A flaghoist is said to be "closed up" when its top is touching at the point of hoist. The point of hoist is the block attached to the yardarm through which the halyard carrying the hoist is rove. It is the highest point to which the signal can be raised. Signals when hoisted by the originator are normally hoisted closed up.

A flaghoist is said to be "at the dip" when hoisted three-fourths of the way up to the point of hoist (fig. 5-3). Flaghoists made in answer to or to repeat the original signal are normally hoisted at the dip until understood; then they are hoisted close up. Relaying ships are always to repeat the flaghoist at the dip until it has been acknowledged by the ships for which they are responsible, after which they close up the signal.

A flaghoist is said to be "hauled down" when it is returned to the deck. The moment of hauling down is the moment of execution unless the time of execution is otherwise indicated. The signal is to be acted upon as soon as understood, or the signification of a signal indicates that it is to be executed on dipping.

Best results are achieved in flaghoist communication when signals can be made as a single hoist and hauled down before another signal is hoisted. If the hoist is too long (when it cannot be displayed on one halyard), it is to be broken where a tack would normally be inserted. If the entire signal cannot be made on three halyards, it is usually advisable to make two or more hoists. When this is done, the heading is hoisted and left flying close up until completion of the signals.

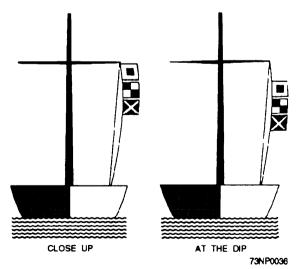


Figure 5-3.—Flaghoist close up and at the dip.

More information on the hoisting of flaghoist signals is contained in ACP 129.

READING FLAGHOISTS

It is not enough to know every flag and pennant by sight; you have to read flags in their proper sequence to interpret their meaning correctly.

When several flaghoists are displayed simultaneously, they are read in the following order: masthead, triatic stay, starboard yardarm, and port yardarm. Locations of halyards vary on ships because superstructure characteristics differ. Figure 5-4 shows the locations.

You should read flags of a single hoist from the top down. If a signal flown on a yardarm is divided into more than one hoist, read from the top down and from outboard in, as in figure 5-5. A flaghoist that is to be read <u>before</u> another that is flying at the same time may be described as being in a superior position. If a flaghoist is to be read <u>after</u> another, it is referred to as being in an inferior position.

Read flags hoisted at the triatic stay from forward to aft. (See fig. 5-6.)

FLAGHOIST ESSENTIALS

Strive for the following essentials in flaghoist signaling:

- 1. Always bend on the correct flag.
- 2. Hoist rapidly and smoothly.

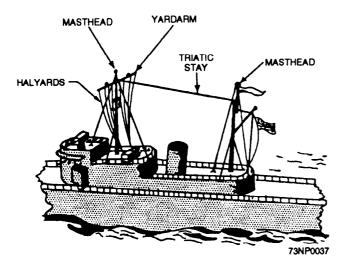


Figure 5-4.—Flaghoist locations.

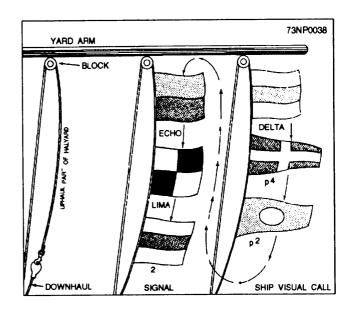


Figure 5-5.—Reading a flaghoist.

- 3. Send all flags up clear, unfouled by rigging or by themselves.
- 4. Haul down signals sharply and smoothly, without allowing them to stream to leeward or over the side.
- 5. Restow flags rapidly and accurately so you are ready for the next signal to be made.

FLAG BAG OPERATIONS

The day will soon come when it is your turn to stand in front of the flag bag and bend on the flags. You should know the flag bag so well that you can close your eyes and still come close to hitting the slot where a particular flag is stowed. The ability to bend

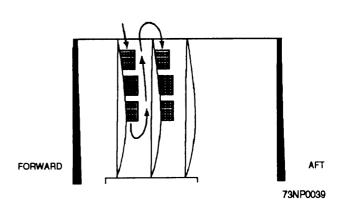


Figure 5-6.—Reading a flaghoist at the triatic stay.

on flags with accuracy and speed comes only with practice.

There are many correct ways to bend on the flags. The best way is the method that enables YOU to do the fastest and most accurate job possible. A description of one method of doing the job follows:

To bend on, lead the uphaul part of the halyard under the upper part of your right arm, with the snap on the end of the uphaul grasped firmly in your right hand. The ring on the end of the downhaul is in your left hand. (When standing by for a hoist to be called out by the spotter, you can hook the snap on the uphaul into the ring on the downhaul. This method prevents the snap from accidentally being pulled out of your hand and swinging out of reach.)

As the first flag is called out by the spotter, hook the halyard snap into the ring on the correct flag. Pull the ring out of its slot with the snap and let go. Then grasp the snap of the flag and pull it out. You are now ready to hook into the ring of the next flag. Continue this process until the spotter calls out, "Going up." Then hook the snap, which you are holding in your right hand, into the ring on the downhaul, which you have in your left hand. You are now ready to tell the person on the uphaul to "Take it up." The actual hoisting of a signal is generally a two-man job.

Be sure there is sufficient slack in the halyard to prevent the snap from pulling out of your hand. In a strong wind, put the downhaul ring over a belaying pin to free your left hand, and use both hands to handle the flags. Never make fast a halyard in use. These halyards must be free for hoisting or lowering at an instant's notice.

NOTE

All Signalmen should know the location of the emergency radar cutoff switches for their signal bridge. In the event of a lost hoist, this can prevent extensive equipment damge.

When you call out to the person on the uphaul, "Take it up," keep a slight strain on the halyard so the hoist goes almost straight up, not out with the wind. The person on the uphaul should haul away quickly and speedily, hoisting the signal to the dip or close-up position, as appropriate. PQS for flag bag operator is contained in NAVEDTRA 43354B, Personnel Qualification Standards for Visual Communications.

HAULING DOWN SIGNALS

When a signal is hauled down, the person on the uphaul should keep a slight strain on the halyard as you lower the hoist; otherwise, the hoist might fly out with the wind and become fouled.

Haul in quickly and evenly on the downhaul. As the ring on the downhaul comes to your hand, grasp it. Then grasp the snap on the bottom flag, and unhook it from the halyard ring. Place the downhaul ring on the belaying pin located in the fife rail on the flag bag front. Keep hauling the rest of the hoist down to the deck. As the topmost flag passes, unhook the snap end on the halyard, and hook it on the ring located on or near the flag bag.

As soon as the flags are on deck, the person on the uphaul should unsnap them one from another and hand them to you for restowing in the bag. As the flags are handed to you, the name of each flag is called out to assist you in getting them stowed. When all flags are stowed and the halyards are made ready for the next hoist, call out to the spotter, "Ready on the starboard/port bag."

PARTS OF A FLAGHOIST MESSAGE

LEARNING OBJECTIVES: Identify and explain the parts of a flaghoist message.

A flaghoist signal or message consists of two parts, heading and text. The heading may be specified by hoisting a visual call sign. Normally, a flaghoist signal or message hoisted without call signs is addressed to all units within visual contact or to the commander of the unit.

HEADING

The heading of a flaghoist message is hoisted superior to the text. That is, it is displayed in a position that is read before the text of a message. So long as the heading appears before the text, it may be flown from the yardarm on outboard hoists (as in fig. 5-5) or at the triatic stay or masthead.

Modification of Heading

The heading of a flag signal may be modified by the use of the four substitutes as follows:

FIRST SUB over the call sign of the originator hoisted where best seen means "The originator of this signal is_____." Intervening ships relay this signal

to the addressees or to the OTC if there are no addressees.

SECOND SUB in place of the address means "For general information, no specific address, no answer required."

THIRD SUB preceding the address means "This signal, in addition to being addressed to certain ships for action, is for general information and is to be relayed and answered as an all ships signal."

FOURTH SUB at the yardarm means "Accompanying signals are taken from ATP 2, volume II" or national or regional defense organization publications.

Construction of Heading

In constructing flaghoist calls, numerals are expressed by numeral pennants except when numeral flags are specifically indicated.

The heading consists of the address. Ordinarily, only action addressees are indicated, but information and exempted addressees may be included. Flag W and the NEGAT pennant, respectively, are used for information and exempted addressees. The address may be omitted under the following situations:

- Signals to all ships from the OTC or senior officer present afloat
- By ships addressing the OTC that are in direct visual communication with him/her and no relay is required and no confusion would result
- By ships or commands addressing emergency signals to the OTC

A tackline must often be used to separate call signs to avoid ambiguous combinations of flags in the heading. It will always be used to separate flag W from the call sign preceding and/or following it in the same hoist.

Address designations used in flaghoist messages are call signs, address groups, and sequence numbers.

Example of a heading:

ACTION—All ships

INFO-Main body

EXEMPT—Amphibious force

HOIST—p2 TACK W TACK p3 NEGAT p3p2

TEXT

The text of flaghoist messages will consist of such prescribed signals and plain language as may be necessary to convey the subject matter expressed by the originator. Usually the message is made up of signals from the *Allied Maritime Tactical Signal and Maneuvering Book*, ATP 1, volume II, or the *International Code of Signals*, Pub 102. International signaling is discussed in chapter 6.

ALLIED MARITIME TACTICAL SIGNAL AND MANEUVERING BOOK

LEARNING OBJECTIVES: Explain the procedure for the use of the Allied Maritime Tactical Signal and Maneuvering Book, ATP 1, volume II, including general procedures, listing chapters, the use of the supplementary tables, single flags and pennants, substitutes, and supplementing signals. Describe procedures for encoding and decoding signals.

ATP 1, volume II, is the origin of most tactical communications between Allied naval units.

The signal book consists of instructions, tabulated sections of code, and special tables. The 34 chapters of the signal book are constituted as follows:

Chapter l—General Instructions for Use of the Book

Chapter 2—Single Flags and Special Pennants

Chapter 3—Emergency Alarm and Action Signals

Chapters 4-9—Maneuvering Signals Using Pennants

Chapters 10-34—Two-Letter and Number-Letter Signals, Special Tables (Operational and Administrative), and Main Signal Vocabulary

The overall security classification of the signal book is NATO Restricted, but groups contained therein are a simple unchanging code and have no security. If the system of signaling is subject to interception, only unclassified information should be sent in the code. Unless specified otherwise, signals from the signal book may be used with any communication media, including flashing light, voice radio, and flaghoist.

<u>Chapter 1 is a must for all Signalmen.</u> It contains the general instructions for use of this publication. Take time to thoroughly study this chapter.

Signals relating to certain important types of actions are grouped in flag action tables. For instance, signals relating to ASW are located in one table. There are six flag action tables; each flag action table has a

number flag indicator assigned to it. This flag may be left flying in a superior position when successive signals from the same table are being used. Participants then may keep their books open to one table instead of searching through the book each time a signal is hoisted. This practice permits greater speed in signaling.

Supplementary tables are used primarily to expand the meaning of certain basic groups; they may be used with any governing or basic group as appropriate. When an item from the supplementary table is used by itself, it must be preceded by the basic group BV.

CONSTRUCTING FLAGHOIST SIGNALS

Words are seldom spelled out in Navy flaghoist signaling because of the length and number of hoists required and the time required to handle the hoists. The signal book provides chapter and basic groups and suffixes. A chapter group is a two-letter group allocated to a particular chapter and the main vocabulary from which all signals in that chapter are derived.

Example: CM—communication

A basic group is a signal consisting of the chapter group followed by one or more figures.

Example: CM1

Suffixes are provided so that the basic meaning can be varied. When a suffix is used, it must follow the last figure of the group, separated by a tack. The tack may be omitted if no ambiguity will arise.

Example: CMl—1, CMl—l—l

Signals from ATP 1, volume II may he supplemented or modified by the use of the following:

- 1. Governing pennants
- 2. Governing groups
- 3. Call signs, sequence numbers, and unit indicators
- 4. Description signals
- 5. Plain text
- 6. Operating signals
- 7. International Code of Signals
- 8. Tables

Governing Pennants

Three governing pennants—PREPARATIVE, INTERROGATIVE, and NEGATIVE—are available

to impart a different sense to a signal. When hoisted with signals, their meanings are as follows:

PREP-Prepare to

INT—Questions or inquiries

NEGAT—Cease, do not; or to give a negative sense to an otherwise affirmative (informatory) statement.

In the following examples, EXI means "Commence run":

PREP EXI—Prepare to commence run.

INT EXI—Are you commencing run?

NEGAT EXI—Do not commence run.

A governing pennant governs all signal groups when separated from those groups by TACK or when hoisted alone on an adjacent halyard. If the pennant is to govern only one of several signal groups, it must immediately precede the group governed. The other groups must be separated from the governed group by TACK.

Governing Groups

Governing groups are two-letter signals used in much the same fashion as governing pennants. The governing group followed by a tack, precedes the signal and governs that signal only. The governing group may be used alone when no ambiguity will result. The following list contains the governing groups:

BA	Action is being carried out (or I am)
BB	Action completed (or I have)
BC	I recommend
BD	Report time you will be ready (to)
BE	Report when ready (to)
BF	Am ready (to)(at)
BG	My present intention is to
BH	Request permission to
BI	Action is not being carried out (or I am not)
BJ	If you desire
BK	When you desire
BL	When ready
BM	Enemy/opponent is or I am being
BT	For use see ATP 1, volume II (articles 164e and 164g
BU	Unable to
BV	Take action or information as indicated from
	appropriate supplementary table (ATP 1, volume
	II, chapter 33)
BX	Indicates end of series of groups governed by
	governing groups

BZ

Well done

Example:

If a junior commanding officer requests permission to proceed on duties assigned by signaling BH TACK the signal, his/her superior would reply C, signifying "Permission granted to proceed on duties assigned"

When the governing group applies to two or more signals following it, BX is inserted after the last of the signals to which it is to apply.

Call Signs, Sequence Numbers, and Unit Indicators

Call signs, address groups, and sequence numbers may be used in conjunction with groups from ATP 1, volume II to complete, amplify, or vary the meaning of the signal. Generally, call signs used to indicate ships, units, or commanders referred to in the meaning of the signal, follow the entire signal. An exception is those signals indicating bearing and distance from a unit, where the call sign appears within the signal.

A unit indicator (GROUP/FLOT, SQUAD, DIV, SUBDIV) following a signal indicates the unit carrying out the meaning of the signal.

Description Signals

A description signal, used to supplement a signal group, normally describes own or enemy forces or conveys other information. A description signal consists of DESIG, followed by numerals, letters, or groups necessary to amplify the meaning of the signal. For example, a flaghoist reporting the sighting of enemy forces might be supplemented by DESIG 2C, which would indicate the forces were composed of two light cruisers.

Plain Language

When appropriate, DESIG followed by letters and/or numerals indicates that such a group is to be interpreted literally. DESIG is to immediately precede the group to be interpreted, and only that group. When more than one group is to be governed, DESIG separated by TACK will govern those groups. Exceptions are when a plain number must be used to complete the meaning of a signal or when used in the meaning of a signal.

Words may be spelled out within the text of a signal to complete or modify the meaning. For

example, to spell out the word yes, the hoist would be as follows:

DESIG pennant

YANKEE flag

ECHO flag

SIERRA flag

Because spelling out words requires a number of flags, plain text is never used in flaghoist signals when the same information can be conveyed by code.

Operating Signals

The Q and Z communication operating signals contained in ACP 131 may be used alone or to supplement groups in ATP 1, volume II.

International Code of Signals

Signals contained in *International Code of Signals*, Pub 102, may be used alone or in conjunction with signal groups from ATP 1, volume II. Whenever international groups are used alone in flaghoist, international procedure is to be used in answering. Whenever military use is made of *International Code of Signals*, groups will be preceded by CODE when transmitting by flaghoist, or by INTERCO by Morse, voice, or semaphore.

When communicating with non-military ships or station or non-Allied warships, refer to International Code of Signals.

Tables

The supplementary tables are located in chapter 33 of ATP 1, volume II. These tables are primarily intended to expand the meaning of certain basic groups, but they can be used with any signal within the volume. When adding an item from the supplementary tables to the basic group, the table identifying letter must follow the item number. When a signal from the supplementary tables is used by itself, it will be preceded by the governing group BV except for the supplementary table X, where it may be preceded by the second substitute. Numeral flags 1 through 9 are not to be used with the supplementary table.

BASIC MANEUVERING FLAGS

Navy signal flags and pennants include six that pertain directly to maneuvering: CORPEN, FORMATION, SPEED, STATION, SCREEN, and TURN. Signals using these basic maneuvering flags are called maneuvering signals.

A complete maneuvering signal contains one or more maneuvering flags and pennants, followed or preceded by numeral flags. Three numeral flags indicate a true course or a true bearing, depending upon the maneuvering flag or pennant with which they are displayed. When fewer than three flags are hoisted, they indicate a relative change of course or bearing in 10-degree units. The ANSWER pennant indicates half units, 5-degree increments, a fraction (1/2), or a decimal point. If the OTC desires to send a signal for a change of speed to 16.5 knots, for example, the Signalmen would hoist SPEED ONE SIX ANS. For a speed of 12.7 knots, however, they would hoist SPEED ONE TWO ANS SEVEN.

The CORPEN pennant is spoken, written, and transmitted CORPEN. It is used to change the course of ships in succession (known as column movement or wheeling) or, with a modifier, to indicate a course of a ship formation. When CORPEN is used to alter course by wheeling in a relative direction from dead ahead, it precedes the PORT flag or STARBOARD pennant and one or two numeral flags, which indicate the number of tens of degrees; three numeral flags would indicate the course on which to steady.

Examples:

CORPEN STBD 9—Alter course by wheeling to starboard 90 degrees

CORPEN PORT 090—Alter course by wheeling to port to course 090 degrees

CORPEN PORT 4 ANS—Alter course by wheeling to port 45 degrees

The TURN pennant, spoken, written, and transmitted TURN, may be used in any formation. It requires that all addressees put over their rudders simultaneously when the execute signal is given. Interpretation of these signals is always a turn together to starboard or to port.

The direction and specified amount of the turn must be indicated. TURN precedes the PORT flag or STARBOARD pennant and one or two numeral flags that indicate the amount of degrees of the turn in tens of degrees relative to the present course; three numeral flags indicate the course on which to steady.

Examples:

TURN STBD—Ships turn together to starboard 90 degrees

TURN PORT 270—Ships turn together to port to course 270 degrees

TURN STBD 1 ANS—Ships turn together to starboard 15 degrees

The FORMATION pennant, spoken FORMATION but written and transmitted FORM, is used to assemble ships in a formation or to change a formation. The most common use of a FORM signal is to order a group of ships to arrange or rearrange themselves on an indicated line of bearing from the guide. When the desired direction is true, the usual three numeral flags are hoisted. When indicated bearing is relative, inclusion of the PORT flag or STARBOARD pennant determines whether the line of bearing is to the right or left of the guide.

Examples:

FORM 225—Ships are to form on true bearing of 225° from guide.

FORM PORT 9—Ships are to form on relative bearing indicated in tens of degrees from guide (in this instance, 090° relative to port side of the guide).

Relative bearings are always 000° to 359° clockwise around the ship. For purposes of forming up, however, these bearings run only to 180°—bow to stem-and may be on either side of the ship. A good reason for that is there are a number of standard form signals consisting simply of FORM and a number. For instance, FORM 9 without a direction pennant means "Form divisions in line abreast to starboard, division guides bearing astern," a signal entirely different from FORM PORT 9.

Although execution of a FORM signal may require a change of course to carry out the maneuver, the final course always is the same as the original course. The only element that changes is the maneuvering ship's position relative to the guide.

The STATION pennant—spoken, written, and transmitted STATION—is used mainly to assign position or station to a ship or unit that is joining another ship or unit, or to move a ship or unit from one station to another. When accompanied by a distance or interval signal, the pennant indicates the distance a ship or unit is to be stationed from the guide or from the ship indicated in the signal.

When accompanying a ship's call sign, STATION alone directs that ship to take its proper and assigned station.

The SCREEN pennant is spoken, written, and transmitted SCREEN. It is used in signaling various screening situations.

SUBTITUTES

Whenever possible, substitutes are used to prevent alphabet flags, numeral flags, or numeral pennants from appearing more than once in the same hoist. As their names imply, they are substitutes for other flags or pennants used in the hoist.

FIRST SUB repeats the first flag or pennant in the hoist.

SECOND SUB repeats the second flag or pennant in the hoist.

THIRD SUB repeats the third flag or pennant in the hoist.

FOURTH SUB repeats the fourth flag or pennant in the hoist.

To illustrate, the signal CORPEN PORT ZERO ZERO ZERO would read CORPEN FORT ZERO 3rd 4th.

THIRD SUB repeats the third flag, and FOURTH SUB repeats the fourth flag, which already repeats ZERO.

When more than one halyard is used to hoist a signal, each hoist is considered separately as regards substitutes. When a tackline separates hoist components, it is disregarded in the substitute count.

Substitutes also are used as "absence indicators" when a ship is not under way. This is discussed in chapter 10, "Honors and Ceremonies."

UNITS OF REFERENCE

When a signal makes reference to numbers, distances, ranges, heights, depths, speeds, or weights, the unit of reference is as indicated (see fig. 5-7) unless otherwise stated in the meaning of the signal. However, for clarity, the units of reference are stated against some groups using the standard units, which otherwise would not need such a statement.

SIGNALING TIMES AND DATES

When the originator desires to have a signal executed at a specific time instead of when the signal is hauled down, the time indicator, TANGO flag, is used.

In the text of signals, times are expressed as four numerals; the first two denote the hours (00-23) and

Altitude	hundreds of feet
Distance	nautical miles (2,000 yards)
Range	hundreds of yards
Height	feet
Depth	feet
speed	knots
Weight	tons (2,000 pounds)
Sector boundaries	tens of degrees
Sector limits	thousands of yards

Figure 5-7.—Reference units of measurement.

the second two the minutes. ANSWER, instead of the last two figures of a time signal, may be used to express 30 minutes. Thus, 1630 is sent as 16 ANS.

Date-time groups in the text of signals are expressed as six numerals plus the zone indicator; the first set of two numerals denotes the date, the second set the hour, and the third set the minutes. When unable to make this display in one hoist, you may break it between the date and the time group.

When time is sent together with a signal group, TANGO has the following meanings:

T preceding numerals—Action will commence at that time.

T following numerals—Action will be completed by that time.

T between numeral groups—Time by which action is to be completed and time at which action is to commence, respectively.

CO2 means "Assume command."

Examples:

CO2 TACK T1845—Commence assuming command at 1845.

CO2 TACK 1845T—Complete assuming command by 1845.

CO2 TACK 19T1845—Commence assuming command at 1845; complete assuming by 1900.

When time is referred to in the meaning of the signal group, the flag indicator TANGO may be omitted, provided no confusion results.

A time signal applies only to the group immediately preceding it. If signaled time applies to more than one group, flags BRAVO TANGO (BT) are

inserted before the first of the groups to which the time signal applies.

NEGAT over a time signal cancels all signals governed by that time signal.

BRAVO TANGO separated from the remainder of the hoist or display indicates that all signals between BT and the time group are governed by the time group. Thus, as shown in the following display:

FORM3—CORPEN STBD275—SPEED—T13.

FORM 3 and CORPEN STDB 275 are to be executed when hauled down, but speed 15 will be carried out at 1300. To make the signaled time apply to the entire display, the display would read as follows:

BT—FORM 3—CORPEN STBD 275—SPEED 15—T13

When BT is flown separately as the first hoist and left flying during several succeeding displays, all signals made during that period will be executed when BT is hauled down. No time signal is needed with that method of execution.

TIME ZONE INDICATORS

All time signaled in ATP 1, volume II refer to GMT unless otherwise indicated; suffixes, therefore, are not required except to indicate the exception (see fig. 5-8).

	ZONE	,	DESCRIPTION	DESIGNATION LETTERS
7 1/2W	to	7 1/2E	 0	Z
7 1/2E	to	22 1/2E	 -1	Α
22 1/2E	to	37 1/2E	 -2	В
37 1/2E	to	52 1/2E	 -3	С
52 1/2E	to	67 1/2E	 -4	D
67 1/2E	to	82 1/2E	 -5	E
82 1/2E	to	97 1/2E	 -6	F
97 1/2E	to	112 1/2E	 -7	G
112 1/2E	to	127 1/2E	 -8	н
127 1/2E	to	142 1/2E	 -9	I
142 1/2E	to	157 1/2E	 -10	K
157 1/2E	to	172 1/2E	 -11	L
172 1/2E	to	180	 -12	М
7 1/2W	to	22 1/2W	 +1	*N
22 1/2W	to	37 1/2W	 +2	0
37 1/2W	to	52 1/2W	 +3	P
52 1/2W	to	67 1/2W	 +4	Q
67 1/2W	to	82 1/2W	 +5	R
82 1/2W	to	97 1/2W	 +6	S
97 1/2W	to	112 1/2W	 +7	Т
112 1/2W	to	127 1/2W	 +8	U
127 1/2W	to	142 1/2W	 +9	v
142 1/2W	to	157 1/2W	 +10	w
157 1/2W	to	172 1/2W	 +11	x
172 1/2W	to	180	 +12	Y

Figure 5-8.—Time zone indicators

The letter *N* is also used for minus 13; this is provided for a ship in zone minus 12 keeping daylight saving time.

BEARING, DIRECTION, AND DISTANCE

True bearing is signaled by three numerals. Such a signal may be used in conjunction with any signal group to indicate the bearing of the subject of that group.

Relative direction may be signaled by the PORT flag or STARBOARD pennant. One or two numerals may be used to indicate the number of tens of degrees from right ahead.

Bearing and distance, unless otherwise stated, are indicated by the numeral group for bearing, followed by the position or unit indicated (if required) and the numeral group for distance in miles.

SINGLE FLAGS AND PENNANTS

Some single (including basic maneuvering) flags and pennants are in almost constant use by ships in port as well as under way. Many are used so commonly that all hands aboard ship soon know them. Whenever BRAVO is seen flying, for instance, all hands should know that flammable or explosive material is being handled and that the smoking lamp is out.

When two or more single flags or pennants are shown in the same hoist, they must be separated by TACK. Single flags or pennants may be hoisted also with groups from the signal book if separated from the group and themselves by TACK. Signals from the single flag and pennant tables are not to be preceded by EMERGENCY. Individual flags following EMERGENCY have different meanings. Example: OSCAR, when hoisted alone, means man overboard, which is certainly an emergency situation. However, EMERGENCY O has an entirely different meaning. Its meaning may be found in chapter 3 of the signal book.

Single flags also are used in international signaling; do not confuse the meanings of signals under the two procedures.

EMERGENCY SIGNALS

When an emergency exists, or when the tactical situation is such that speed is the main consideration in executing a maneuver, the originator hoists the EMERGENCY pennant as the first flag on the hoist.

Any received signal preceded by EMERGENCY is acted upon as soon as understood. The originator sounds six short blasts on the ship's whistle to call attention to the hoist and, if other than the OTC, passes the signal to the OTC by the most expeditious means authorized.

Emergency signals made by flaghoist are repeated by all ships. FIRST SUB and the originator's call sign are only used with emergency alarm signals. Emergency action signals are repeated flag for flag.

When EMERGENCY is shown with several signal groups, it governs all groups when either separated from them by TACK or hoisted in a superior position on an adjacent halyard. If EMERGENCY is required to govern only one of several groups, it immediately precedes the group to be governed.

EMERGENCY preceding a call executes all signals flying under a similar call sign as soon as understood. Used without a call, EMERGENCY executes all signals flying without a call.

FLAG HOIST PROCEDURES

LEARNING OBJECTIVES: Explain the procedures for acknowledging, answering, canceling, correcting, and relaying flaghoist signals.

ANSWERING AND ACKNOWLEDGING

In transmitting a flaghoist signal, the originator hoists the flags close up with the upper (first) flag against the block. Addressees answer the signal by repeating the hoist, flag for flag, at the dip. Heavy ships and unit commanders will always repeat flag for flag. Small ships will normally act in the same manner; but when signaling conditions warrant, they may use ANS alone or below the call of the originator if necessary to avoid confusion. A flag officer or unit commander may answer a flaghoist addressed to him/her from a ship or unit commander junior to him/her by hoisting ANS at the dip, either alone or below the originator's call. This action tells the originator that an addressee has read the signal correctly. It does not, however, mean that the addressee knows what the message says. The signal watch supervisor should assist in verifying the accuracy of incoming and outgoing signals.

An addressee keeps the hoist at the dip while the OOD and CIC compare interpretations of the signal. When the OOD, by using the term *Understood*, *signal understood*, or a similar phrase, orders you to

acknowledge the signal, do so by hoisting the signal close up, bearing in mind the ship's visual responsibility. This notifies the originator that your ship understands the signal and is ready to carry out any required action. When the originator lowers the hoist, haul down your hoist smartly and inform the OOD that the signal has been hauled down.

When an addressee desires to question a signal, the signal or ANS shall be kept at the dip, and the INTERROGATIVE pennant hoisted on an adjacent halyard. Normally, an address over INT will not be required when communication is only between the originator and the addressee questioning the signal. When necessary to refer to the signal of a specific originator, a call may precede INT.

NOTE

INT signals need not be acknowledged if the signal in question can be clarified, hoisted, or canceled immediately. However, when answered and brought close up on both ships, INT signals should be hauled down to free the halyards for additional signals.

In addition to the provisions for the use of the INTERROGATIVE pennant used alone, it may be amplified and used as follows:

INT 1—Signal now flying not distinguishable.

INT 2—You are repeating signal incorrectly.

INT 3—I am repeating signal incorrectly.

These signals are most effective in expediting flaghoist signaling when passed by flashing light. Once a problem has been identified, regardless of ship (be it the originator, repeating ship, or last ship in visual chain of responsibility), adherence to the procedures for canceling or correcting a hoist are of paramount importance in avoiding early execution or delay and/or confusion in the receipt of the intended signal.

Requests may be acknowledged by a senior officer by hoisting flag CHARLIE or NEGAT below the call of the ship making the request. Such signals constitute both receipt and answer.

CANCELING A SIGNAL

Flaghoist signals are canceled by the following uses of NEGAT:

When only one flag signal is flying, NEGAT hoisted on an adjacent halyard cancels the signal.

When two or more flag signals are flying under the same call, NEGAT hoisted on an adjacent halyard cancels all signals flying. If only one signal is to be canceled, it must be repeated preceded by NEGAT.

When "all ships" signals and specifically addressed signals are flying at the same time, NEGAT without a call preceding it cancels all signals without a call, and NEGAT with a call preceding it cancels all signals under a similar call. If only one signal of several signals under the same call is to be canceled, it must be repeated and preceded by NEGAT under the same call.

The canceling signal and the signal canceled are to be hauled down together when all addressees have acknowledged.

CORRECTING A SIGNAL

Flaghoist signals are corrected as follows:

An originating ship cancels the signal in question, then hoists the correct signal.

A repeating ship hoists the signal meaning "Signal is repeated incorrectly" on an adjacent halyard, then hauls down both signals. The correct signal is then hoisted.

EXPEDITING OF FLAGHOIST SIGNALING

An originating ship may pass its signal by flashing light if there is doubt that its flags can be seen clearly.

Directional or nondirectional light, using proper procedure, can be used. The operating signal ZJL meaning "Hoist the following signal" can be included.

Directional

If directional procedure is used, the signal will be receipted for by light and acknowledged in the normal flaghoist manner. The executive signal need not be made by light when the signal is hauled down.

Nondirectional

If nondirectional procedure is used and no ship will answer, the signal may be repeated as often as necessary, with repetitions being separated by the prosign $\overline{\text{IMI}}$. Ships will acknowledge by flaghoist. The

executive signal will be made by light as the flag signal is hauled down.

Task Organization Call Sign

If a special flaghoist task organization call sign appears in the hoist, the numeral flag will be spelled out and the numeral pennant transmitted in Morse code.

Example: Task Force 56—Six 56

Substitutes, when used as the first flag in the hoist, will be transmitted as FIRST, SECOND, THIRD, or FOURTH.

RELAYING

General relaying procedures are discussed in chapter 4. The following paragraphs contain additional instructions for flaghoist.

Signals are to be relayed by any ship in position to help do so. Whenever practicable, ships repeating the OTC's signal are to do so on halyards corresponding to his/hers.

If the OTC hauls down a signal before all ships have acknowledged, ships that have answered the signal (at the dip) hoist it close up and haul down immediately. Relaying ships are to pass the signal by light to ships for which they are responsible that have not acknowledged the signal.

Signals relayed from the OTC are relayed at the dip, then hoisted close up when the ships addressed have acknowledged. The originator is not indicated.

In relaying signals from ship to ship, the originating ship hoists FIRST SUB followed by her call sign, the addressees' call signs, and the text. FIRST SUB may be omitted if the identity of the originator will be evident to all ships within visual communication range. The relaying ship hoists FIRST SUB above the call sign of the originator close up, followed by the addressees' call signs and the text at the dip.

When individual ships relay signals to the OTC, the procedure is the same as for ship-to-ship relaying except that the call sign of the OTC is considered to be understood and is omitted.

MAKING UP A FLAG FOR THE BREAK

LEARNING OBJECTIVES: Explain the procedures for making up a flag for the break. List flags that should be always made up for the break.

The practice of "breaking" pre-positioned flags and pennants has been followed for many years and is a sign of a smart ship. Flags and pennants should be made up and ready for the break in the following situations:

- Man overboard
- Breakdown of the ship
- Assuming the guide
- Displaying absence indicators
- Displaying personal flags and pennants

Breaking ROMEO, BRAVO, EMERGENCY BREAKAWAY, and PREP during replenishment operations

The first two occasions, in particular, signal emergencies requiring fast action.

To make up a flag for the break, follow the steps illustrated in figure 5-9. The numbered steps correspond to the numbers under each part of the illustration.

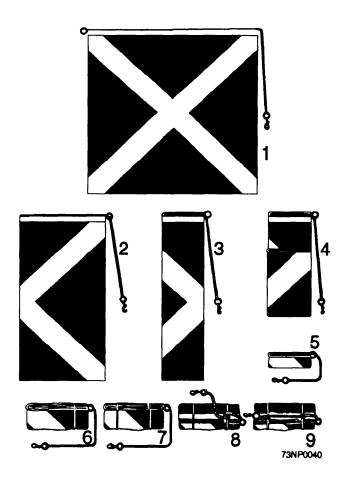


Figure 5-9.—Making up a flag for the break.

- 1. Usually two people hold the flag while folding it into proper form. If no one is available to assist you, lay the flag on deck, hoist end away, with the ring to your left and snap to your right.
- 2. Fold the flag to your right so that the left half just covers the right half.
 - 3. Repeat step 2.
- 4. Fold up the fly end to a position about three-quarters of the way toward the hoist.
- 5. Roll the flag tightly from the fold toward the hoist.
- 6. About 2 inches from each end of the resulting roll, wrap two turns of white twine around the roll. Tie securely.
 - 7. Repeat step 6.
- 8. With the tail line, take a full turn around the twine near the ring, repeating the operation for the twine at the other end of the roll.
 - 9. Repeat step 8.

The flag is now ready for the break. Clear the halyard, bend on the flag, and run it up smartly. A sharp downward pull on the halyard will snap the twine and break the flag.

The national ensign is never made up for the breaking, but is always hoisted briskly and smartly.

SUMMARY

In chapter 5 you were taught flaghoist terminology, flaghoist essentials, how to read flaghoists, the parts of a flaghoist message, and how to execute flaghoist signals. You were given a brief description of the *Allied Maritime Tactical Signal and Maneuvering Book* and were taught how to answer, acknowledge, relay, receipt, and cancel a flaghoist signal. You were given the meanings of single flags and pennants and emergency signals. You were taught the basic maneuvering flags and how to use them. You were taught how to make up a flag for the break and what flags should be made up. **FLAGS**, it's up to you to put forth the effort to become the best!